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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,130

09/20/2006

Roy Cooley

RSSO-02US

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EXAMINER

JANCA, ANDREW JOSEPH

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,130	Applicant(s) COOLEY ET AL.	
	Examiner Andrew Janca	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 15-27 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 15-19 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I, claims 1-3 in the reply filed on 4/30/10 is acknowledged.
2. New claims 15-27 have been submitted by Applicants by the preliminary amendment of 5/17/10, which also amends claims 1-3. Of these, claims 1-3, 15-19, and 25-27 correspond to the elected invention of group I, a calculational apparatus adapted for a computer-controlled concrete mixer, and the amendments incorporate limitations of the invention of non-elected group II into the one independent claim of remaining group I. However, new process claims 20-24 concern a method of calculating and reporting concrete slump, corresponding to the non-elected invention of group III.
3. Claims 20-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.
4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

5. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 15-19, and 25-27 are rejected under 35 USC 102(b) as anticipated by US 6,484,079 B2 to Buckelew et al, which incorporates US 5,713,663 to Zandberg et al by reference (Buckelew 8:8-20).
8. With regard to claim 1, Buckelew teach a system for calculating and reporting slump in a delivery vehicle 10 having a mixing drum and hydraulic drive (8:62-67; also Zandberg 3:26-27) for rotating the mixing drum, comprising: a rotational sensor 22 mounted to the mixing drum (either directly or via its connection to the truck) and configured to sense drum activity in the form of a rotational movement of the mixing drum (8:46-50, 9:64-67); a hydraulic sensor 22 coupled to the hydraulic drive and configured to sense drum activity in the form of a hydraulic pressure required to turn the mixing drum (8:62-67; also Zandberg 5:44-46); and a processor computing a rheological value for a mixture within the mixing drum using the sensors, wherein the rotational

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movement of or hydraulic pressure applied to the mixing drum, or both, over a period of time is used in calculating the rheological parameter of the material within the mixing drum (8:8-20, Zandberg 3:18ff) (4:45ff; figure 2).

9. The additional limitations of claim 2 are statements of intended use. The material within the mixing drum of Buckelew may be concrete if desired, and the history of the rotational speed of the mixing drum may if desired be used to qualify a calculation of current slump. It has been held that the manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim. See *Ex Parte Masham*, 2 USPQ2d 1647 (BPAI 1987).

10. The additional limitations of claim 3 are statements of intended use. The material within the mixing drum of Buckelew may be concrete if desired, and the stability of the rotational speed of the mixing drum may if desired be used to qualify a calculation of current slump. It has been held that the manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim. See *Ex Parte Masham*, 2 USPQ2d 1647 (BPAI 1987).

11. The additional limitations of claim 15, including that the material within the mixing drum may be concrete and said processor further determines from the sensed rotational speed of or hydraulic pressure applied to the drum, or both, one or more of: adequacy of mixing of concrete, the occurrence of a concrete pour action from the mixing drum, appropriateness of a concrete discharge from the mixing drum, concrete slump values,

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the occurrence of a fluid discharge into the mixing drum, appropriateness of a fluid discharge into the mixing drum, effect of a fluid discharge into the mixing drum, water supply conditions, are taught by Buckelew (10:19-40, 11:1-4; Zandberg 8:15-28).

12. The additional limitations of claim 16 are statements of intended use. However, Buckelew teach that said processor may determine whether to discharge fluid into said drum based upon rheological properties determined by said processor (Zandberg 8:22-28).

13. The additional limitations of claims 17-19 and 25-27 are statements of intended use. The fluid discharged into the drum of Buckelew may comprise a chemical additive if desired, which may be water or a superplasticizer if desired. It has been held that “[e]xpressions relating the apparatus to contents thereof during an intended operation are of no significance in determining the patentability of the apparatus claim.” See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

Double Patenting

14. Applicant is advised that should claims 17-19 be found allowable, claims 25-27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

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15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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16. Claims 1-3, 15-19, and 25-27 are provisionally rejected on the ground of nonstatutory double patenting over claims 23-25 of copending Application No. 11/764,832. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Both recite a system for managing the mixing of construction material in a rotating mixing drum, comprising a sensor coupled to the mixing drum and or drive system therefor and configured to sense rotation and/or torque applied to the mixing drum and/or the contents thereof; a processor receiving data from the sensor and utilizing said data in evaluating the condition of the material in the mixing drum, wherein said processor is further responsive to stored information regarding the contents of the drum in evaluating the condition of the contents in the mixing drum (necessarily, otherwise it could not calculate a quantity such as slump had it not a program written for calculating the slump of concrete); wherein said sensor is a rotational sensor providing an indication of rotational speed of said drum, and wherein said processor is further responsive to torque applied to said drum as reflected in hydraulic pressure [reported by another sensor] in a drive system coupled to said drum.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other

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copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Janca whose telephone number is (571) 270-5550. The examiner can normally be reached on M-Th 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJJ

/Tony G Soohoo/
Primary Examiner, Art Unit 1797
